

ABSTRACT

A multicast network device, such as a router may support a plurality of multicast routing protocols. A single multicast routing table may be provided to store the multicast routes for each multicast routing protocol and a selected set of unicast routes from a unicast routing table. In order to synchronize route changes in the multicast routing table with the plurality of multicast routing protocols, a route ID value is assigned to each route in the multicast routing table. Each multicast routing protocol is assigned a bookmark in a route change queue, where the bookmark is assigned the route ID value of the last route processed by the multicast routing protocol. When a route is changed, the route is assigned a new route ID value and stored in the route change queue. A multicast routing protocol may determine if a route change has occurred by comparing its bookmark to the highest route ID value in the route change queue.